# Implementation Plan


# Production Sector

**Company Information**

*Partner Address Label Here*

If the information provided above is incorrect, please make corrections below.

| | |
|---|---|
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## Implementation Plan Elements

**ELEMENT 1 Best Management Practices (BMPs)**

The following BMPs have been identified as significant opportunities to cost effectively reduce methane emissions from the production sector. They were selected based on their applicability to the industry, economic feasibility, and cost-effectiveness. There are 2 core BMPs for the production sector:

**BMP 1** Identify and replace high-bleed pneumatic devices
**BMP 2** Install flash tank separators on glycol dehydrators

For detailed information on these BMPs, please refer to the Lessons Learned publications on the Natural Gas STAR Web site: <www.epa.gov/gasstar/lessons.htm>.

**ELEMENT 2 Partner Reported Opportunities (PROs)**

Current partners have reported many processes and technologies that are considered "other Best Management Practices" by the program. New partners are encouraged to evaluate and report current and new practices or technologies that cost effectively reduce methane emissions. PROs are made available to all partners, and can be viewed at: <www.epa.gov/gasstar/pro/index.htm#table>.

**ELEMENT 3 Inventory Past Reductions**

Partners are encouraged to report past methane emission reductions back to 1990. Accounting for these historical reductions will create a permanent record of your company's methane emission reduction efforts. More information is available in the Spring 1999 Natural Gas STAR Partner Update, which can be viewed at: <www.epa.gov/gasstar/newsletters.htm>.

The Implementation Plan is designed to be a dynamic tool for Natural Gas STAR Partners to plan their program activities. As company priorities and plans shift over time, the Implementation Plan may be revised or updated by submitting a new form to the program.

# ELEMENT 1
## Best Management Practices

### BMP 1
### Identify and Replace High-Bleed Pneumatic Devices

| | |
|---|---|
| *Pneumatic devices used to control and monitor gas and liquid flows and levels in dehydrators and separators, temperature in dehydrator regenerators, and pressure in flash tanks emit large amounts of methane into the atmosphere. Replacing these with low- or no-bleed devices reduces or eliminates emissions and improves safety.* | *Estimated Reduction Potential 124 Mcf/year/device* |

*Will you be implementing this BMP?* X *Yes* ☐ *No*

*If no, why?*

☐ *Not cost effective*

X *May consider at a later date* (contingent on outcome of inventory)

☐ *Other* _____

*Please describe:* _____

CPAI is committed to conducting an inventory of high bleed devices at the Beluga River Gas Field as part of the Implementation Plan. CPAI will determine appropriate follow up in terms of economic methane emission controls based on the outcome of the survey.

*If yes, at what scale will you be implementing this BMP?*

☐ *Company Wide*

☐ *Pilot Project*

X *Other*

*Please describe:* As noted, CPAI will manage toward this BMP at a specific field location. The BMP is not applicable in other Alaska work locations.

### Activity Summary

*Number of high-bleed pneumatic devices in system?* TBD

*Number of high-bleed pneumatic devices to be replaced?* TBD

### Replacement Schedule

*Number of high-bleed pneumatic devices to be replaced by the end of:*

*Year 1:* _____ *Year 2:* _____ *Year 3:* _____ *Year 4:* _____

### Additional Information on Anticipated Plans and Projects

*If additional space is needed, please continue on the back.*

## BMP 2
## Install Flash Tank Separators on Glycol Dehydrators

*Installing a flash tank separator in a glycol dehydrator facilitates the removal of methane and natural gas liquids from the glycol stream. The recovered gas can be put back into the pipeline, used as a fuel on-site, or flared.*

*Estimated Reduction Potential*
*170 scf/MMcf of throughput*

Will you be implementing this BMP? ☐ Yes X No

If no, why?

- ☐ Not cost effective
- ☐ May consider at a later date
- ☐ Other _____

Please describe: _____

This BMP is not applicable within CPAI operations. Other design measures are in place that minimize methane emissions from glycol dehydrators.

If yes, at what scale will you be implementing this BMP?

- ☐ Company Wide
- ☐ Pilot Project
- ☐ Other _____

Please describe: _____

### Activity Summary

Number of glycol dehydrators currently equipped with flash tank separators _____

Number of glycol dehydrators suitable for flash tank installation? _____

### Replacement Schedule

Number of flash tank separators to be installed by the end of:

Year 1: _____ Year 2: _____ Year 3: _____ Year 4: _____

### Additional Information on Anticipated Plans and Projects

*If additional space is needed, please continue on the back.*

## *ELEMENT 2*
## *Best Management Practices*

### *PROs*

*Your company may take advantage of additional technologies or practices to reduce methane emissions. These can be reported to Natural Gas STAR as PROs. Following is a list of some of the PROs that have been reported by other Gas STAR partners, which may be applicable to your operations (for more information on these PROs, please view:* <www.epa.gov/gasstar/pro/index.htm> *and* <www.epa.gov/gasstar/lessons.htm> *):*

- φ Install Vapor Recovery Units (VRUs)
- φ Install flares
- φ Install electronic safety devices
- φ Install instrument air systems
- φ Eliminate unnecessary equipment and/or systems
- φ Install plunger lifts in gas wells

| PROs you will be implementing | Please describe |
|---|---|
| PRO Install Vapor Recovery Units (VRUs)<br><br>At what scale will you be implementing this BMP?<br>☐ Company Wide<br>☐ Pilot Project<br>X Other Site specific project | CPAI is committed to an engineering evaluation of vapor recovery for the CPF-1 produced water storage tanks (2) in conjunction with long range planning efforts. |
| PRO Directed Inspection and Maintenance with Optical Imaging<br><br>At what scale will you be implementing this BMP?<br>☐ Company Wide<br>X Pilot Project<br>☐ Other _____ | CPAI will be collaborating with COP Canada to conduct a pilot leak detection survey of Alaska assets. |
| PRO _____<br><br>At what scale will you be implementing this BMP?<br>☐ Company Wide<br>☐ Pilot Project<br>☐ Other _____ | _____ |
| PRO _____<br><br>At what scale will you be implementing this BMP?<br>☐ Company Wide<br>☐ Pilot Project<br>☐ Other _____ | _____ |